

What we claim is:

1. A bandwidth control method comprising the steps of:

holding a packet,

counting a packet length of the packet, and

5 reading the held packet at a line bandwidth and controlling a read start timing of a next packet, based on the packet length, in order that a difference between the line bandwidth and a setting bandwidth assumes a packet interval.

2. The bandwidth control method as claimed in claim 1, further  
10 comprising the steps of notifying a stop of a packet transmission to a packet transmitting side when a number of packets residing in a buffer exceeds a first threshold value, and performing a flow control to notify a restart of the packet transmission to the packet transmitting side when the number of packets residing in the buffer assumes equal to or  
15 less than a second threshold value.

3. The bandwidth control method as claimed in claim 2 wherein the flow control is performed only to a subscriber side.

4. The bandwidth control method as claimed in claim 1 wherein the method is performed between an MAC layer process and a physical  
20 layer process.

5. A bandwidth control apparatus comprising:

a buffer for holding a packet,

a counter for counting a packet length of the packet, and

25 a read controller for reading the packet at a line bandwidth from the buffer and controlling a read start timing of a next packet, based on the packet length, in order that a difference between the line bandwidth and a setting bandwidth assumes a packet interval.

6. The bandwidth control apparatus as claimed in claim 5, further  
30 comprising a buffer monitor for notifying a stop of a packet transmission to a packet transmitting side when a number of packets residing in the buffer exceeds a first threshold value, and performing a

flow control to notify a restart of the packet transmission to the packet transmitting side when the number of packets residing in the buffer becomes equal to or less than a second threshold value.

5 7. The bandwidth control apparatus as claimed in claim 6 wherein the buffer monitor performs the flow control only to a subscriber side.

8. A bandwidth control system arranging the bandwidth control apparatus mentioned in claims 5 to 7 between an MAC layer controller and a physical layer controller.

10 9. The bandwidth control system as claimed in claim 8 wherein an interface with each layer controller comprises a standard interface.

10. The bandwidth control apparatus as claimed in claim 5 wherein the packet has a variable length.